This program will save a set of characters stored in the graphics RAM or will load them back from cassette.

The program uses 2K of user RAM for temporary storage (from B#00 to BBFF) of the character bytes. Hence NEW should be typed before entering this program to allocate enough memory for the program plus character data storage.

## Using the Program

- 1) Enter the program from the listing and save it on cassette tape
- To save characters you have previously created or modified 21 in the graphics RAM.

(a) type RUN 2000

- (b) the screen will clear; the top line will display numbers from 0 to 127 as the characters are read from the graphics RAM and put into the area B400 to BBF?
- (c) when 127 is reached, a Filename will be requested. Proceed as you would for a Basic save
- (d) The Basic program plus the data will be saved on tape
- 3) To load characters already saved on tape
  - (a) LOAD as with a normal Basic load

- (b) After loading, type RUN 3000 (c) The screen will clear; the top line will display numbers 0 to 127 as the characters are written to the graphics RAM.
- (d) When finished, programs may now be entered using the graphics characters

## Reminder

CTRL G - turns on graphics characters

CTRL C - turns off graphics

Type RETURN immediately afterwards, ignore ERR 4

## Program Comments

LINES	FUNCTION
2010	- CHR(25), CHR(N) reads 16 bytes from the graphics RAM
2040 - 2060	- the 16 bytes are placed in RAM starting at ${\tt B400}$
2080 - 2082	- enters a machine language routine starting at 3C80 which jumps to the cassette save routine
2084	- SAVE finish at \$BCCU

11NES PUNCTION
2086 - SAVS start at \$B171
2090 - jumps to monitor save routine

3010 - CHR(27;, CHR(N) prepares to write 16 bytes to graphics FAM

2030 - 3060 - 16 bytes are written to graphics RAM for each of 127 characters

2000 CLS:LINES 1:REM SAVE 128 CHAR 2010 FOR N=0 TH 127:PRINTE10,01,N,CHR(25),CHR(N), 2010 FOR V=0 TO 15 2040 N=PEUK (\$BD90+Y) 2050 POKE (\$8400+Y+N\*16),0 2060 NEXT Y:NEXT N:LINES 16 7080 POKE \$1080.\$65:POKE \$BC81.#9F 2082 FORE 4DCB2, 4F8: POKE \$BC83, \$08 2084 POKE \$BDE4, \$BC: POKE \$BDE5, \$00 2086 POKE \$BDE2, \$B1: POKE \$BDE3, \$71 2090 X=U:R(\$BC80):END 2100 REM 3000 CLS:LINES 1:REM LOAD 128 CHAR 3010 FOR N=C 10: 127:FR1NT[10,0], N,CHR(27),CHR(N), 3030 FOR Y=0 TO 15 3010 C=PEEK(\$B400+Y+N\$16) 3050 FRINT CHR(C), 3040 NEXT Y:NEXT N:LINES 16:END